Milton Friedman's economics and political economy: an old Keynesian critique[1]

Abstract

Milton Friedman's influence on the economics profession has been enormous. In part, his success was due to political forces that have made neoliberalism the dominant global ideology, but Friedman also rode those forces and contributed to them. Friedman's professional triumph is testament to the weak intellectual foundations of the economics profession which accepted ideas that are conceptually and empirically flawed. His success has taken economics back in a pre-Keynesian direction and squeezed Keynesianism out of the academy. Friedman's thinking also frames so-called new Keynesian economics which is simply new classical macroeconomics with the addition of imperfect competition and nominal rigidities. By enabling the claim that macroeconomics is fully characterized by a divide between new Keynesian and new classical macroeconomics, new Keynesianism closes the pincer that excludes old Keynesianism. As long as that pincer holds, economics will remain under Friedman's shadow.

Keywords: Friedman, monetarism, new classical macroeconomics, new Keynesianism, neoliberalism.

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1. Friedman's influence on economics

Milton Friedman died on November 16, 2006, aged 94. As many noted at the time, Friedman was perhaps the most influential economist of the last quarter of the twentieth century. If the thirty-year period from 1945-1975 was the "Age of Keynes", then the thirty-year period from 1975 - 2005 can legitimately be called the "Age of Friedman". Not only did Friedman contribute to reshaping the thinking of the economics profession by displacing Keynesian economics, he also had a profound political impact through his

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linking of capitalism and freedom in his famous 1962 book. This impact is captured in Lawrence Summers' (2006) panegyric to Friedman titled "The Great Liberator", published in The *New York Times* shortly after his death:

> "Not so long ago, we were all Keynesians. Equally, any honest Democrat will admit that we are now all Friedmanites."

Now, in the wake of the global financial crisis of 2008 and the ensuing Great Stagnation, events are chipping away at Friedman's standing. That has created an intellectually schizophrenic moment when events increasingly speak to the correctness of old Keynesian economics, but Friedman's political economy remains dominant among economists and political elites. That condition blocks a full theoretical revival of the Keynesian economics and it has grave economic policy consequences.

This paper presents an old Keynesian critique of Milton Friedman's intellectual contribution.[2] The paper questions both the quality and the durability of Friedman's economic arguments, but it fully acknowledges his impact as political economist and political partisan. The label of old Keynesianism is specifically invoked to distinguish from new Keynesianism. The latter is a label that has corrupted and confused the meaning of Keynesianism, making it more difficult to distinguish Keynesian economics from Friedman's macroeconomics which now shapes modern macroeconomics.

New Keynesian economics is a genetic mutant of so-called IS/LM "bastard Keynesianism" associated with Paul Samuelson's MIT School of Economics.[3] New Keynesianism abandons the Keynesian vestige and jumps the intellectual threshold,

[2] The term "old Keynesian" was used by my teacher and mentor James Tobin (1993) to describe his macroeconomic perspective. Tobin was Friedman's great intellectual rival. Both were awarded the Swedish Riksbank's Nobel Memorial Prize in Economics. In my view, Friedman lost the intellectual arguments yet won the war of ideas, whereas Tobin won the arguments but lost the war - at least, as of the moment.

[3] The term 'bastard Keynesianism' was coined by Joan Robinson (1962). Bastard Keynesianism interpreted Keynes' *General Theory* through the lens of price and nominal wage rigidity, but it still retained Keynes' monetary theory of interest rates.

becoming rational expectations new classical macroeconomics with the addition of imperfect competition and price and nominal wage rigidities. Consequently, it is better labeled "new Pigovian" economics (Palley, 2009) as its emphasis on market imperfections represents the approach of Arthur Pigou, who was Keynes' great intellectual rival at Cambridge in the 1930s. This means new Keynesianism has little to do with Keynes and much to do with Friedman who is the intellectual father of new classical macroeconomics.

This connection between Friedman and new Keynesianism is largely unrecognized and that lack of recognition poses a massive barrier to understanding and reopening macroeconomics. By enabling the claim that macroeconomics is fully characterized by a divide between new Keynesian and new classical macroeconomics, new Keynesianism closes the pincer that excludes old Keynesianism.[4] As long as that pincer holds, economics will remain under Friedman's shadow. Breaking the pincer requires surfacing the role of Friedman's thinking in new Keynesian economics and making clear the distinction between old Keynesian and new Keynesian economics.

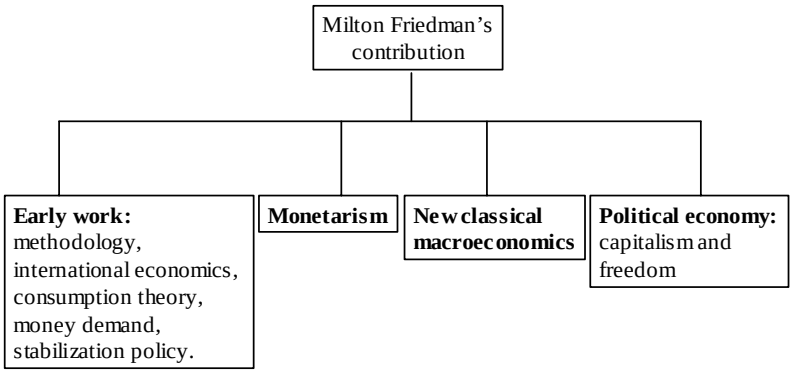
2. A taxonomy of Milton Friedman's contribution

Figure 35.1 provides a four-part taxonomy of Friedman's intellectual contribution that is used to structure the rest of the essay. The first branch is labeled Friedman's "early work" and it includes his contribution to methodology, international economics, the theory of consumption, the theory of money demand, and stabilization policy. The second branch is

[4] To be precise, there are three positions: Friedman's (1968) new classical macroeconomics with adaptive expectations, Lucas' (1973) new classical macroeconomics with rational expectations, and new Keynesian macroeconomics. Friedman has protracted nominal mis-contracting owing to adaptive expectations; Lucas has very temporary nominal mis-contacting owing to rational expectations; and new Keynesianism has lengthy protracted nominal mis-contracting due to menu costs and long-term nominal contracts. All share a common meta-theoretical macroeconomic framework that sees the macroeconomic problem in terms of nominal mis-contracting, though the explanation and duration of mis-contracting varies.

labeled “monetarism”. The third branch is labeled “new classical macroeconomics” and is associated with the doctrine of the natural rate of unemployment that is also referred to as the NAIRU (non-accelerating inflation rate of unemployment). Tobin (1980, 1981) refers to original monetarism as monetarism mark I and new classical macroeconomics as monetarism mark II. The fourth branch is labeled “political economy” and refers to Friedman’s work on the relation between capitalism and freedom.

Figure 35.1. A taxonomy of Milton Friedman’s intellectual contribution.



3. Early work

Friedman’s early work constitutes an eclectic body but it has all had major impact. His early work set the stage for his later contributions and there is significant consistency between the two.

(3.a) Methodology

Though principally a monetary macroeconomist, Friedman had an important impact on economists’ understanding of methodology. His essay “The methodology of positive economics” (Friedman, 1953a) has had a profound, continuing, and baleful influence on

economists' understanding. A generation of students was fed it and it impacted the understanding of almost all (old Keynesians included). With the profession having become completely dismissive of methodological concerns, it continues to dominate understanding and practice despite its deep flaws.

Friedman's methodological frame rests on a distinction between "positive" and "normative" economics. The core premise is:

> "Positive economics is in principle independent of any particular ethical position or normative judgments…it deals with "what is," and not with "what ought to be" (Friedman, 1953a, p.4)."

According to Friedman, positive economics is about economic theory, whereas normative economics is about economic policy and what the goals of the economy should be. That view claims theory is value-free and unaffected by the values of the theorist and the values of the society in which the theorist works. It has become widely held and serves to insulate mainstream economics against charges of being value-laden. Moreover, since there is no longer active discourse about or interest in methodology, that serves to block arguments about value-laden theory from getting on the table. In this fashion, students are taught that orthodox economic theory is value-free.

A second methodological fallacy was Friedman's claim about the irrelevance of realism of assumptions for economic theory:

> "(T)he relevant question to ask about the "assumptions" of a theory is not whether they are descriptively "realistic," for they never are, but whether they are sufficiently goo approximations for the purpose in hand. And this question can only be answered by seeing whether the theory works (Friedman, 1953a, p.15)."

According to Friedman a theory cannot be judged by the realism (or lack thereof) of its assumptions, rendering assumptions a free parameter to be constructed and picked so that the theory works.

In making the argument, Friedman the polemicist appeals to natural science and then does a sleight of hand that transfers the argument to economics. However, the argument does not transfer because economics is a social and behavioral science which marks it as fundamentally different. Atoms do not theorize about atoms, but economic actors (economists) theorize about other economic actors. Economists are both theorists and participants in the economy. They have powers of introspection and their own economic experiences, providing an additional basis for assessing theory that is unavailable in natural sciences. Those introspective insights and experiences are data that impose additional constraints on economic theory and should reconcile with theory. Friedman blithely ignores this fact.[5]

Together, the denial of values in theory and the dismissal of realism of assumptions provide a barrier to critique. The denial of values in theory protects modern macroeconomics from charges that it is highly politicized, while dismissal of realism of assumptions protects microeconomic theory, including the micro-foundations of macroeconomics.

Old Keynesians were also guilty in their acceptance of Friedman's flawed methodological analysis. However, old Keynesians have now become the victims of that analysis because it defends orthodox microeconomic and macroeconomic theory from critique (including Keynesian critique) that would compel change.

(3.b) International economics

[5] The irrelevance of realism of assumptions is now an entrenched feature of modern economics that is difficult to challenge. In many regards, the new "behavioral economics" is focused on doing that, and it has had some initial success. This explains why so many propositions of behavioral economics are common sense. If introspection were part of the economic theorist's tool kit, behavioral economics would be much less needed as economics would begin with realistic and plausible assumptions that conform to introspective understandings and experience.

With regard to international economics, Friedman's (1953b) essay "The case for flexible exchange rates" has been hugely important. After the Great Depression, flexible exchange rates were viewed with policy suspicion because of the competitive devaluations of the 1930s. Friedman was a pioneer in the rehabilitation of flexible exchange rates, arguing they facilitated international economic adjustment, avoided the need for painful disruptive internal price level adjustments, and avoided the potential for disruption and instability associated with discrete official devaluation.

Friedman argues flexible exchange rates are preferable because they constitute a self-adjusting market mechanism instead of a mechanism that relies on government intervention which is likely to be poorly executed and possibly destabilizing. In contrast, the market is assumed to be stabilizing. The argument is there exists a fundamental equilibrium exchange rate. When the rate is undervalued, speculators buy and make profits as they drive the rate up toward the fundamental equilibrium: when it is overvalued, speculators sell and make money as they drive the rate down toward the fundamental equilibrium.

These two arguments, about the stabilizing role of markets and disruptive effects of discretionary government policy intervention, repeat persistently in Friedman's monetary macroeconomic analysis. From an old Keynesian vantage, there are three critiques re their validity with regard to exchange rates.

First, Friedman asserts the stability of foreign exchange (FX) markets. However, empirical evidence shows exchange rates are essentially never at purchasing power parity and instead appear to follow long swings that go above and below PPP. Furthermore, empirical models do a terrible job predicting the real exchange rate (Meese and Rogoff,

1983; Taylor, 1995; Rogoff, 1999; Isard, 2007; Chinn, 2008). These features of exchange rates led Tobin (1978) to propose a small tax on FX dealings to weed out speculators and diminish exchange rate volatility. This old Keynesian skepticism toward the stabilizing role of speculation in FX markets extends to financial markets more broadly. In *The General theory*, Keynes (1936) questioned the capacity of financial markets to set interest rates appropriately due to fluctuations in liquidity preference. Minsky (1992) developed his financial instability hypothesis whereby financial markets had a genetic proclivity to gradually create unstable conditions (Palley, 2011).

Second, Friedman's political economy is constructed in terms of a competent market with a unified set of interests versus an incompetent government. Old Keynesians question both the assumptions of competency of markets and incompetence of government. In addition, Left Keynesians criticize the assumption of unified market interests. In reality, economies are marked by class and other economic divides. In a flexible exchange rate world, financial capital can discipline governments by threatening to exit if they pursue policies deemed unfavorable to financial capital. This problem is especially acute in emerging market economies, but it also afflicts developed economies. For instance, President Francois Mitterand's abandonment of his Keynesian stimulus program in June 1983, which signaled Europe's shift to neoliberalism, is partly attributed to international financial market pressure on the French franc. Such conflict, about which more later, is completely absent in Friedman's political economy.

Third, Friedman's views on the real economic effects of exchange rate flexibility assume benign outcomes. However, Latin American structuralists (Sunkel, 1958; Olivera, 1964) argue that exchange rate depreciation can cause of disruptive inflation due to

structural constraints and imbalances within developing economies. Exchange rate depreciation can also be contractionary because of income distribution effects (Krugman and Taylor, 1978).

(3.c) The theory of consumption

Friedman's (1957) monograph *A Theory of the Consumption Function* constitutes his contribution to consumption theory. It was largely accepted by old Keynesians and made important affirmative contributions. However, it also contained significant implications that were subversive to Keynesianism and which old Keynesians seemed unaware of.

Keynes' *General Theory* introduced the notion of an aggregate consumption function into macroeconomics. Based on his assertion of a general psychological law, Keynes (1936, p.96) claimed that the marginal propensity to consume (MPC) diminished with income, which implied a diminishing average propensity to consume (APC). That claim of a diminishing APC was challenged by Kuznets (1946), who showed that the US economy was characterized by a long-run constant APC. Kuznets' finding set up an apparent contradiction whereby short-run data showed a declining APC whereas long-run data showed a constant APC.

Friedman's permanent income hypothesis (PIH) reconciled this apparent contradiction and also made important theoretical contributions. The hypothesis asserts that households consume a fixed proportion of permanent income, defined as the annuity value of all expected lifetime income streams and wealth. With regard to theory, the PIH emphasized the forward-looking nature of consumption decisions which take account of both current and future earnings. That forward-looking dimension was understated in Keynes' formulation, which tended to emphasize the role of current income.

Second, the PIH explained why consumption spending would tend to be very stable and fluctuate less than current income. That is because permanent income, which is calculated over lifetime, is much more stable than current income which fluctuates with the business cycle. Thus, consumption only changes in response to changes in permanent income, and temporary fluctuations in current income have no impact except to the extent that they fractionally affect permanent income.

Third, the PIH explains persistence in consumption spending, providing an alternative to consumption norms and habits as an explanation of persistence. According to the PIH, consumption persistence derives from the stability of permanent income which fluctuates little because of its lifetime scope. This contrasts with norms and habits that explain persistence in terms of high utility costs of adjusting consumption.

Fourth, the PIH was consistent with the more general utility maximizing lifecycle theory of consumption developed by Modigliani and Brumberg (1954). It involves the special assumptions of a zero interest rate, a zero discount rate, no liquidity constraints, and perfect complete financial markets that enable monetization of future income streams into permanent income.

As regards empirical contribution, Friedman reconciled the difference between short-run (cross-section) regression estimates of consumption and long-run aggregate time-series regression estimates by appeal to a statistical errors-in-variables argument. The argument is that cross-section estimates use actual household income rather than permanent household income. As more households are in the middle of the income distribution, the observed distribution of actual household income (which equals permanent income plus transitory shocks) tends to be more spread out than permanent

income. Consequently, regression estimates using actual income tend to find a flatter slope: hence, the finding that cross-section consumption function estimates are flatter than time-series aggregate per capita consumption function estimates.

There are two subversive aspects to Friedman's PIH that were essentially over-looked by old Keynesians. First, the PIH asserts that all households have the same constant MPC out of permanent income. Consequently, income redistribution has no impact on aggregate consumption spending and income inequality is irrelevant for consumption spending and AD. That was inconsistent with Keynesian thinking based on Keynes's consumption function in which income inequality reduces consumption spending and AD because the APC declines with income. By accepting the PIH, old Keynesians therefore neutered an important component of the Keynesian economic policy agenda.

Second, the Keynesian consumption function was stagnationist. It implied stagnationist tendencies would assert themselves as the economy grew and income increased because of a declining APC. This argument was associated with the left Keynesian position articulated by Steindl (1952). The PIH undercut that argument.

That points to a distinction between old Keynesians and left Keynesians. Old Keynesians believe income distribution matters for AD and the economy can get trapped with unemployment because of AD shortage attributable to income inequality. Left Keynesians add the additional hypothesis of secular stagnation. The PIH undercut both. However, the old Keynesian argument can be restored via a relative permanent income theory of consumption (Palley, 2010) that fuses the arguments of Keynes (1936), Duesenberry (1948, 1949) and Friedman (1957). According to the relative PIH,

household APC is a negative function of household relative permanent income. Consequently, increased income inequality can reduce the economy-wide APC. In this fashion, the insights of Friedman's theory of consumption are made consistent with old Keynesian theory and its view of the relation between income inequality and AD.

(3.d) Money demand

Another important piece of Friedman's early work was his 1956 essay "The quantity theory of money: a restatement", the contents of which provided the central theoretical building block in the doctrine that was to become known as "monetarism". Friedman's 1956 essay provided a systematic statement of Chicago School monetary macroeconomics developed in the 1930s by Henry Simons and Lloyd Mints. According to Friedman, the Chicago School version of the quantity theory was a theory of money demand:

> "The quantity theory is in the first instance a theory of the demand for money (Friedman, 1956 [1969, p.95])."

Friedman's formulation of money demand raises four important issues. First, money demand is not a fixed proportion of income as per the Cambridge cash balance equation. Instead, it is a function of all relevant variables including preferences, transactions technologies, rates of return on all assets including durable goods, inflation, wealth, and nominal income. It is also homogeneous of degree one with respect to prices (Friedman, 1956 [1969, p.100-102]). Second, money demand is a solution outcome from a utility maximization choice program defined in real magnitudes (Friedman, 1956 [1969, p.102]). Third, money demand is a functional transformation of the velocity of money and vice-versa so that the velocity of money is determined by the ratio of nominal income to money demand (Friedman, 1956 [1969, p.103]). Fourth, the money demand function is

stable. That does not mean money demand is constant: it does mean that it is not subject to frequent large unpredictable shifts.

> "The quantity theorist accepts the empirical hypothesis that the demand for money is highly stable – more stable than functions such as the consumption function…..the quantity theorist need not, and generally does not, mean the real quantity of money demanded per unit of output, or the velocity of circulation of money, is to be regarded as numerically constant over time; .. For the stability he expects is in the functional relation between the quantity of money demanded and the variables that determine it,..(Friedman, 1956 [1969, 108-109])."

From an old Keynesian standpoint, Friedman's (1956) restatement of the quantity theory of money is fully acceptable. It only became problematic when it was later placed in the context of monetarism. In fact, Friedman's formulation of money demand as part of a general utility maximization program remedies a major specification flaw in the Keynesian ISLM model (Hicks, 1937). The initial ISLM specification treated household saving decisions (IS related) as separable from portfolio decisions (LM related). That separation contributed to a misguided debate which represented Keynesian liquidity preference theory as a stock-based theory of interest rates and classical loanable funds theory as a flow-based theory of interest rates (Smith, 1956; Tsiang, 1956; Patinkin, 1958). However, once money demand is seen as part of a unified choice problem in which agents maximize utility by simultaneously making saving and portfolio allocation decisions, the distinction becomes moot. Liquidity preference is both a stock and a flow theory because variables affecting saving decisions also impact portfolio decisions, and vice-versa. Saving flow decisions and portfolio stock decisions are made at the same time as part of a unified interdependent decision making process. Friedman's framing of money demand therefore strengthens Keynesian liquidity preference theory of interest

rates and it was incorporated in Tobin's (1982) multi-asset statement of the Keynesian ISLM model.[6]

Ironically, the part of Friedman's (1956) restatement of the quantity theory that later became controversial concerned the stability of money demand, which is a claim old Keynesian econometricians working on money demand widely accepted in the 1960s. However, the stability of money demand and the velocity of money became an issue when embedded in monetarism. That is because monetarism argued that the stability of velocity proved economic fluctuations were not the result of private sector actions: instead, economic fluctuations were the result of central bank induced changes in the money supply.

(3.e) Stabilization policy

The last element of Friedman's early work concerns his writings on stabilization policy, both fiscal and monetary. One important article on this subject was his article (Friedman, 1948) "A monetary and fiscal framework for economic stability." A second was his article (Friedman, 1961) "The lag in effects of monetary policy." The 1948 paper is fully old Keynesian in its identification of the need to stabilize AD to reduce unemployment and cyclical fluctuations. An old Keynesian reading it in 1948 would probably have found little to disagree with. However, embedded in the article were arguments that were later to be used against old Keynesianism and in the service of neoliberal macroeconomic policy.

[6] The unified decision framework was incorporated in Tobin's 1982 model but it was not part of his 1969 model.

Friedman's work on stabilization policy focused on two themes; lags in policy implementation and the uncertainties created by discretionary policy. In his 1948 paper Friedman writes:

> "There is a strong presumption that these discretionary actions will in general be subject to longer lags than the automatic reactions and hence will be destabilizing even more frequently…The basis for this presumption can best be seen by subdividing into three parts the total lag in any action to offset a disturbance: (1) the lag between the need for action and the recognition of this need; (2) the lag between recognition of the need for action and the taking of action; and (3) the lag between the action and its effects (Friedman, 1948 [1971, p.344])."

The various lags associated with discretionary policy speak to the superiority of automatic stabilizers, where possible. That is something an old Keynesian would also agree with. However, in subsequent work on monetarism Friedman's critique of macroeconomic policy became increasingly politicized, reflecting his political economy and its antipathetic inclination toward government. Thus, instead of technical lags being the problem, government incompetence and bias became the problem – as evidenced by Friedman's claim that discretionary monetary policy was a principal cause of the Great Depression. Given such reasoning, policy rules became an important means of reducing policy induced uncertainty with the gain from reduced uncertainty outweighing any benefits from discretion. This political critique of discretionary policy was muted in his 1948 article, but it was already present:

> "In conclusion, I should like to emphasize the modest aim of the proposal…Its claim to serious consideration is that it provides a stable framework of fiscal and monetary action, that it largely eliminates the uncertainty and undesirable political implications of discretionary action by government authorities,…(Friedman, 1948 [1971, p.351])".

A final feature of Friedman's 1948 paper is its identification and emphasis on price and wage rigidity as the cause of unemployment. From the standpoint of theoretical economics it speaks to Friedman's enduring belief in rigidities as the cause of

unemployment; from a political economy standpoint it speaks to his belief in the stability and optimality of market economies with flexible prices; and from a policy standpoint it speaks to his belief in the need to flexibilize prices and nominal wages. These features of Friedman's thinking were to reassert themselves forty years later in his (Friedman, 1968) theory of the natural rate of unemployment.

4. Monetarism

Monetarism represents a consolidation of Milton Friedman's early work on monetary macroeconomics. It also catapulted him on to the global stage as a macroeconomic theorist.

The empirical case for monetarism was laid out in Friedman's co-authored monetary history of the United States (Friedman and Schwartz, 1963a, 1963b); the theoretical case for monetarism was laid out in his 1956 restatement of the quantity theory and his 1971 monograph "A Theoretical Framework for Monetary Analysis": and monetarist policy analysis, including critique of Keynesian policy, was laid out in his (Friedman, 1970) Institute of Economic Affairs brief titled "The Counter-Revolution in Monetary Theory".

Empirical monetarism (Friedman and Schwarz, 1963a, 1963b) sought to provide historical evidence supportive of the monetarism's theoretical claims. These claims include a tight stable relationship between the money supply and nominal income and the claim that money supply growth causes nominal income growth. It also claimed the Federal Reserve was substantially to blame for the severity of the Great Depression because it mistakenly tightened monetary policy at the onset of the downturn. What should have been a recession was thereby turned into a depression:

> "When the evidence was examined in detail it turned out that bad monetary policy had to be given a very large share of the blame. In the United States, there was a reduction in the quantity of money by a third from 1929 to 1933. This reduction in the quantity of money clearly made the depression much longer and more severe than it would otherwise have been. Moreover, and equally important, it turned out that the reduction in the quantity of money was not a consequence of the unwillingness of horses to drink. It was not a consequence of being unable to push on a string. It was a direct consequence of the policies followed by the Federal Reserve system (Friedman, 1970, p.6)."

This empirical argument was in turn used to support the monetarist recommendation of rule driven monetary policy.

Theoretical monetarism (Friedman, 1956, 1971) is best understood through the Fisher equation of exchange given by

(1) $MV = Y = Py$

M = nominal money supply, V = velocity of money, Y = nominal GDP, P = price level, y = real GDP. This relation can be transformed into a rates of change relation given by

(2) $g_M + g_V = g_Y = g_P + g_y$

g_M = rate of nominal money supply growth, g_V = rate of change of velocity, g_Y = rate of nominal GDP growth, g_P = rate of inflation, and g_y = rate of real GDP growth.

According to monetarist theory, the money supply and money supply growth is controlled by the central bank. Money demand and velocity are stable, as argued by Friedman (1956) in his restatement of the quantity theory, implying $g_V = 0$. Lastly, causation runs from MV to Py as supposedly documented by Friedman and Schwarz (1963a, 1963b). Putting the pieces together, the monetary authority therefore controls nominal income growth. If real GDP growth is determined exogenously in accordance with neoclassical growth theory and equal to k percent, then the monetary authority can

achieve price stability with steady real output growth by setting nominal money supply growth equal to k percent per annum.

The above monetarist framework consolidates most of the themes in Friedman's early work in monetary macroeconomics. The private market economy is stable because of the stability of velocity and money demand. Aside from random disturbances, fluctuations in economic activity are due to fluctuations in money supply growth caused by monetary policy. That makes incompetent government policy responsible for economic fluctuations. At the policy level, this augurs for replacing discretionary monetary policy with rules based monetary policy. From a monetarist perspective, the rule should be steady k-percent growth of the money supply.[7]

A third feature of the monetarist model is that fiscal policy is ineffective:

> "The Keynesians regarded as a clear implication of their position the proposition that fiscal policy by itself is important in affecting the level of income…The 'monetarists' rejected this proposition and maintained that fiscal policy by itself is largely ineffective, and what matters is what happens to the quantity of money (Friedman, 1970, p.8)."

The logic of this claim follows from the Fisher equation of exchange plus the claim that MV causes Y.

A fourth feature of monetarism, also apparent in Friedman's writing on political economy, is Friedman's brilliant polemic. This is exemplified in his dictum that "inflation is always and everywhere a monetary phenomenon (Friedman, 1970, p.11)." That phrase has become an aphorism for monetarism, but no thinking old Keynesian

[7] In his essay on the optimum quantity of money Friedman (1969) applied Chicago School microeconomics to argue the nominal interest rate should be zero. The microeconomic logic is that money is costless to produce and therefore the marginal cost of holding money should be zero. If the equilibrium real interest rate is 3 percent (i.e. equal to the real growth rate) and the nominal interest rate is zero, this implies a deflation rate of 3 percent. Applying monetarist macroeconomic logic of the Fisher equation then implies nominal money supply growth should be zero.

would ever have disagreed with it. Inflation concerns the rate of change of nominal prices and nominal prices are intrinsically a monetary phenomenon. The real issue of significance is what causes inflation. For monetarists, inflation is caused by central bank driven money supply growth in excess of real output growth. Old Keynesians argue inflation can also have its cause in the private sector economy. Financial markets can endogenously fuel excessive nominal demand growth, and labor markets can trigger cost inflation via conflict over the distribution of income. Latin American structuralist economists (Sunkel, 1958; Olivera, 1964) also emphasized imported inflation arising from nominal exchange rate shocks and structural bottleneck inflation arising from conditions of economic under-development.

More than just rejecting monetarism's theory of inflation, Old Keynesians reject monetarism at both the core empirical and theoretical level. As regards empirical monetarism, Tobin (1970) provided a critique of empirical monetarism and showed that the pattern of money supply – nominal income correlations which Friedman and Schwarz (1963a, 1963b) claimed confirmed monetarism, is actually consistent with an ultra-Keynesian model in which the budget deficit is counter-cyclical and money-financed. Temin (1976) provided another critique of empirical monetarism in which he concluded that the Keynesian expenditure shock hypothesis of the Great Depression provided a better account of the timing and pattern of interest rate and income adjustments than did the monetarist money supply shock hypothesis.

Friedman's critique of Federal Reserve monetary policy in 1929 and 1930 is also easily conflated with the old Keynesian critique that the Fed acted sub-optimally. Undoubtedly, the Federal Reserve could have done more, especially in light of the

lessons of the Keynesian revolution in macroeconomics. But that is not the same as causing the Depression. Furthermore, it speaks to the need for discretionary policy rather than rule-based policy. That has been amply borne out by the financial crisis of 2008 which saw the Federal Reserve innovate and fly by the seat of its pants in designing policies that eventually collared the crisis.

As regards theoretical monetarism, Tobin (1974) critiqued Friedman using an ISLM model. In such a model, the only way to derive monetarist propositions about money driving nominal income and fiscal policy being ineffective is to assume a vertical LM schedule in which money demand is strictly proportional to income. Since that hypothesis is explicitly rejected, that showed the theoretical incoherence of monetarism.[8]

Another completely different theoretical critique came from Post Keynesians (Kaldor, 1970, 1982; Moore, 1988; Palley, 2013) who criticized monetarism's theory of the money supply. The cornerstone of monetarism is that central banks control the money supply, thereby rendering the money supply subject to tight exogenous control. Post Keynesians sought to demolish that cornerstone by arguing the money supply is endogenously determined by bank lending. Not only does this critique undo monetarism's policy prescription of targeting money supply growth, it also undercuts monetarism's explanation of economic fluctuations which blames central banks for supposedly mismanaging the money supply. Lastly, it also challenges empirical

[8] Tobin (1974) also showed that Friedman's (1974) attempts to respond to his Keynesian critics only made the situation worse. One response had Friedman shifting to a conventional Keynesian frame in which the economy confronted a positively sloped aggregate supply (AS) schedule in real output – price space, so that the division of nominal output changes between prices and real output depended on the slope of the AS. A second response had Friedman argue that the real interest rate was constant, with the nominal rate adjusting instantly and one-for-one with inflation so that money had no long-run effects. Not only is this description of real interest rates empirically unsupportable, it also meant that fiscal policy was ultra-powerful in contradiction of monetarist claims.

monetarism's claim that the Federal Reserve caused the Great Depression by allowing the money supply to contract catastrophically.

As regards policy monetarism, using a stochastic ISLM model, Poole (1970) showed that targeting the money supply is optimal when IS shocks (real sector shocks) dominate. However, an interest rate rule dominates when LM shocks (financial sector shocks) dominate. The logic is that targeting the interest rate insulates the real economy from disturbances originating in the financial sector.

Poole's (1970) analysis raised the empirical question of the stability of the LM and money demand. For monetarists, historical developments produced another blow because the 1970s ushered in the period of "missing money" when conventional money demand equations systematically over-predicted actual money balances, and thereafter money demand equations proved repeatedly unstable (Goldfeld and Sichel, 1990).

The ultimate discrediting of monetarism was its failure in action. As documented by Tobin (1981), beginning in the 1970s central bankers increasingly embraced monetarism, and in October 1979 the Federal Reserve formally adopted quantitative targets for bank reserves. However, the decade was characterized by higher average inflation and unemployment accompanied by greater volatility of money supply growth. The Federal Reserve's post-October 1979 experiment with quantitative reserve targets also produced significant interest rate volatility that contributed to exchange rate complications. These difficulties led to the abandonment of monetarist operating procedures in 1981. This entire episode comes as close to a pure experiment as is reasonably possible in the political world of policy economics and monetarism was found wanting, just as old Keynesians predicted.

5. New classical macroeconomics (NCM)

Monetarism is now a historical curiosity, theoretically and empirically discredited, yet Milton Friedman the macroeconomist is not. The reason is Friedman's (1968) reinvention of monetarism as NCM, which Tobin (1981) calls monetarism II. The new theory focused on the Phillips curve and introduced the idea of a natural rate of unemployment, also known as the non-accelerating inflation rate of unemployment (NAIRU). It explained the existence of the Phillips curve in terms of a monetary misperceptions theory of the business cycle. Misperceptions of inflation result in the economy generating an empirical relation that looks like the old Keynesian Phillips curve. However, once those misperceptions are cleared up, the economy reverts to the natural rate of unemployment which is unaffected by inflation.

Friedman's (1968) inflation misperceptions theory provided a counter to old Keynesian Phillips curve theory that claimed the existence of a long-run trade-off between inflation and unemployment. That Keynesian claim challenged a core monetarist belief about the long-run neutrality of money. According to Friedman's theory, the natural rate of unemployment or NAIRU reflects real frictions and imperfections in labor markets:

> "To avoid misunderstanding, let me emphasize that by using the term "natural" rate of unemployment, I do not mean to suggest that it is immutable or unchangeable. On the contrary, many of the market characteristics that determine it are man-made and policy-made. In the United States, for example, legal minimum wage rates, the Walsh-Healy and davis-Bacon Acts, and the strength of labor unions all make the natural rate of unemployment higher than it would be otherwise. Improvements in employment exchanges, in the availability of information about job vacancies and labor supply, and so on, would tend to lower the natural rate of unemployment. I use the term "natural" for the same reasons Wicksell did – to try to separate the real forces from monetary forces (Friedman, 1968 [1979, 96-97]).

In accordance with standard neoclassical microeconomic theory, the money supply and inflation can have no impact on labor market equilibrium because these variables have no impact on labor demand (i.e. the marginal product of labor) or labor supply. To the extent that there is an apparent negatively sloped Phillips curve relation, it is a temporary phenomenon borne of misperceptions of the inflation rate among workers. Increases in the rate of money supply growth increase inflation, and workers may increase labor supply to the extent that higher inflation and resulting higher nominal wage offers are misperceived as increased real wages. However, when workers realize there has been no increase in the real wage, labor supply falls back and the economy returns to the natural rate of unemployment.

Friedman developed this misperceptions theory in the context of adaptive expectations. Robert Lucas (1973), his colleague at Chicago, placed it in the context of rational expectations. That placement further restricted policy possibilities regarding exploiting the Phillips curve trade-off. In Friedman's adaptive expectations version policy-makers could keep accelerating money supply growth, thereby fooling workers by staying one-step ahead of workers' adaptive expectations. In Lucas's rational expectations version such persistent fooling was impossible because workers would learn about policymakers' money supply acceleration rule and take account of it in forming inflation expectations, thereby neutralizing it.

Mark II monetarism has important similarities and differences from mark I monetarism. The single biggest difference is that mark I monetarism was developed under the shadow of Keynesianism and therefore attributed power to monetary policy to impact real output. Mark II monetarism represents a total break with Keynesianism and a

reversion to pre-Keynesian classical macroeconomics, with the addition of concern with expectations.

This break represents a logical evolution of Friedman's thought. Both his early work and mark I monetarism sit uncomfortably with Keynesianism, leaving readers unclear about Friedman's relation to Keynesian economics. Both versions of monetarism assert the long-run neutrality of money, but mark II monetarism makes clear the foundation of that claim and it also makes clear the basis of non-neutral short-run effects. Mark I monetarism (Friedman, 1971) appealed to the existence of a mysterious "missing equation" that supposedly split the response to money supply changes into price and real output effects. Mark II monetarism divides money supply changes into expected and unexpected changes. Expected changes have pure price level effects; unexpected changes produce a mix of price level and temporary real output effects, with that mix depending on the slope of the aggregate supply schedule (i.e. firms' marginal cost schedule). Mark I monetarism (Friedman, 1971) also made appeal to the real interest rate being fixed. In mark II monetarism it is invariant to expected changes in the money supply, but can deviate in response to unexpected changes.

Mark II monetarism also changed the logic of Friedman's position on fiscal policy. Mark I monetarism claimed fiscal policy was ineffective with regard to output because of a monetary constraint. Mark II monetarism invokes a completely different economic logic. Fiscal policy can now affect the composition output and the real interest

rate via its impact on AD, but it has no affect on output unless it impacts labor supply or the marginal product of labor.[9]

Perhaps the greatest change in mark II monetarism concerns modeling. Mark I monetarism suffered from lack of a coherent macroeconomic model, and Friedman was repeatedly bested in professional debates by Tobin (1970, 1974). Mark II monetarism placed Friedman's thought in the context of the classical macro model which could be formulated in mathematically coherent fashion (Sargent, 1979, chapter I). When paired with rational expectations (RE), the model acquired further mathematical sophistication that appealed to economists who had come to believe mathematical technique was more important than economic ideas, a belief that was assisted by Friedman's methodology of positive economics and its denial of the realism of assumptions. Such thinking had also infected old Keynesians, which helps explain why so many students of old Keynesians switched sides. Furthermore, RE is largely uninteresting in standard Keynesian models, whereas it yields additional anti-Keynesian claims in the classical model. Mark II monetarism therefore benefitted from the modeling implications of incorporating RE within the classical macro model, reversing the modeling inferiority that afflicted mark I monetarism.[10]

Just as mark I monetarism drew on Friedman's early work, so too does mark II monetarism. First, the explanation of the natural rate of unemployment is constructed in

[9] Barro (1974) further restricted these effects with his neo-Ricardian hypothesis that asserted households had an infinite horizon and offset current tax cuts and government spending by recognizing they implied an equal and opposite future tax increases of the same net present value.

[10] Tobin (1980, chapter II) emphasizes the distinction between rational expectations and continuous market clearing, and notes that it is the latter which is critical for mark II monetarism. However, it is the former that gave mark II monetarism its professional sex appeal.

terms of market imperfections and rigidities. That links back to Friedman's 1948 essay on stabilization policy that emphasized the role of price rigidities in creating unemployment.

Second, mark II monetarism assumes the economy is stable and is either at full employment equilibrium or gravitates quickly to it. This characterization is a constant in Friedman's work and it is defended by appeal to his (Friedman, 1953a) "methodology of positive economics". Instead of explaining how equilibrium is achieved, new classical rational expectations models assume it is. Reality is asserted to correspond to a stable equilibrium outcome, even if that requires reliance on implausible assumptions about ordinary workers and households solving for market clearing prices or prices jumping to the adjustment path that yields saddle-path stability.

Third, aside from random unpredictable shocks, both mark I and mark II monetarism assert that fluctuations in economic activity are due to fluctuations in the money supply caused by central banks. Fourth, avoiding such policy induced fluctuations calls for monetary policy rules. However, mark II monetarism slightly changes the justification for rules. Mark I monetarism emphasized administrative problems with 'inside' and 'outside' lags that rendered discretionary policy inferior to automatic stabilizer or rule-based policy. Mark II monetarism sees rules as a communication device that can reduce misperceptions by private sector agents. That communication aspect then calls for policy credibility so that the public believes the monetary authority when it announces a policy rule: this spawned a subsidiary research agenda regarding policies such as central bank independence. Furthermore, Friedman also seems to have become more hostile to government as part of his evolution as a political economist (discussed below). Thus, whereas mark I monetarism saw government as incompetent but

benevolent, mark II monetarism sees government as incompetent and self-interested, as reflected in language of policy "fooling" workers. That gives an additional rationale for rules: avoid lags, improve communication, and tie government's hands.

In sum, though Friedman's (1968) mark II monetarism contains assumptions and themes that are present in both his early work and his work on mark I monetarism, his natural rate hypothesis and monetary misperceptions theory of the business cycle constitute a repudiation of Keynesian economics and a revival of pre-Keynesian macroeconomics. Viewed through an old Keynesian lens, Friedman's early work and mark I monetarism work had always exhibited discomfort with Keynesian ideas, lending it a queer "neither fish nor fowl" character. Mark II monetarism constitutes a total break with Keynesian macroeconomics and represents the logical conclusion of his inquiries. The Keynesian theory of demand determined equilibrium output and employment is rejected in favor of classical labor market equilibrium theory, and Keynes's liquidity preference theory of interest rates is rejected in favor of classical loanable funds theory.

Old Keynesians obviously reject NCM for theoretical reasons, but they also reject it for empirical reasons. As documented by Okun (1980), the implications of NCM are not supported empirically. First, business cycles show significant persistent deviations around trend output which is inconsistent with the rational expectations version of natural rate theory. Second, real wages are slightly pro-cyclical but according to monetary misperceptions business cycle theory they should be strictly counter-cyclical as workers are fooled into supplying extra labor. Third, job quits are strongly pro-cyclical but they should be counter-cyclical according to NCM. That is because economic contractions are the result of workers being fooled into withdrawing labor (i.e. quitting).

Mishkin (1982) provided another challenge to the rational expectations version of Friedman's monetary misperceptions theory of the business cycle. Contrary to mark II monetarism's predictions, Mishkin reports that fully anticipated changes in monetary policy have systematic real effects that are similar to those from unanticipated changes.

The natural rate of unemployment has also proven to be operationally useless for policy purposes. Though it has been ideologically useful in arguing for policy that attacks unions, the minimum wage, and worker rights and protections as these features are argued to increase the natural rate, it has been useless for conduct of macroeconomic policy. That is because the natural rate is unobservable and has to be estimated, and empirical estimates have proved highly variable. For the US economy, estimates have varied between four and eight percent (Staiger et al., 1997). This wide range makes it of no use for guiding macroeconomic policy as policymakers have no idea which side of the natural rate the economy is on.

Lastly, mark II monetarism suffers from the same Post-Keynesian critique of its theory of the money supply as did mark I monetarism. Both forms of monetarism take the money supply as subject to tight exogenous control by the monetary authority, when in fact it has significant endogenous elements related to bank lending.

6. Political economy

The fourth branch of Friedman's intellectual contribution concerns political economy, as represented in his classic *Capitalism and Freedom* (Friedman, 1962). This contribution is perhaps the most enduring and influential aspect of his legacy. It has profoundly influenced both the economics profession and the general public, pushing all to adopt a more pro-market, pro-business, anti-government view of the world.

The man and the moment are always intimately linked. Friedman's advocacy benefitted from the Cold War that saw the US push an idealized belief in free markets as part of its counter to the geo-political challenge posed by the Soviet Union. He also benefitted from the US corporate counter-attack against the politics and economics of New Deal Keynesianism. Thus, corporate support in the 1950s, channeled through the American Enterprise Institute, was critical in making Friedman a visible public intellectual. That said, if the moment was propitious for Friedman's vision of political economy, Friedman was also the man for the moment.

Friedman, and his Chicago University colleague George Stigler, can be viewed as the intellectual godfathers of American neoliberalism. Neoliberalism is both a political and economic philosophy (Palley, 2012, chapter 2). As a political philosophy, it maintains that a *laissez-faire* deregulated market economy is the best way to promote individual freedom. As an economic philosophy, it maintains that a *laissez-faire* deregulated market economy is the best way to promote economic efficiency and economic well-being.

Friedman's American neoliberalism claims real world market economies produce roughly efficient (i.e. Pareto optimal) outcomes, defined as outcomes where one cannot make someone better off without making someone else worse off. The implication is government should stay out of the picture since public policy cannot improve market outcomes. Though acknowledging the existence of market failures (such as monopoly, natural monopoly, externalities, and under-provision of public goods), these are viewed as relatively rare and of small scale. Moreover, government intervention is claimed to usually make the economy worse off because of bureaucratic incompetence, capture of

regulators by special interests, and political distortions.[11] The conclusion is market failures are relatively rare, and most of the time even market failure is not a justification for government intervention because the costs of government failure exceed those of market failure. Instead, society should aim for minimalist government – a night watchman state - which only provides national defense, protects property and person, and enforces contracts.

A problem with assessing American neoliberalism is that it comes in two stripes: hardcore Chicago School neoliberalism associated with Milton Friedman and softcore MIT School neoliberalism associated with Paul Samuelson. MIT neoliberalism argues real-world economies are afflicted pervasively by market failures. Moreover, it also maintains government can successfully remedy market failure and the Chicago argument of government failure is overstated. Government failure can be prevented by good institutional design that makes government transparent, accountable, and subject to democratic political competition. In contrast to hardcore Chicago School neoliberalism, MIT neoliberalism therefore argues that policy interventions that address market failures can often make everyone better off.

An old Keynesian critique of Friedman's hardcore neoliberalism goes deeper than MIT softcore neoliberalism. It begins with Keynes' observation about free market capitalism, which he termed the "Manchester system":

> "I see no reason to suppose that the existing system seriously misemploys the factors of production which are in use. There are, of course, errors of foresight; but these

[11] The government failure argument is clearly present in Friedman's work on stabilization policy (Friedman, 1948, 1961) and mark I monetarism (Friedman and Schwartz, 1963a, 1963b) and it paved the way for his focus on policy rules. Friedman's government incompetence argument was later supplemented by arguments about bureaucratic failure (Niskannen, 1971), regulatory capture (Stigler, 1971), and rent-seeking behavior (see for example Tullock, 1967; Krueger, 1974). By the 1980s the idea of the benevolent but incompetent public official had been replaced by the self-interested public official (Barro and Gordon, 1983).

> would not be avoided by centralizing decision. When 9,000,000 men are employed out of 10,000,000 willing and able to work, there is no evidence that the labor of these men is misdirected. The complaint against the present system is not that these 9,000,000 men ought to be employed on different tasks, but that tasks should be available for the remaining 1,000,000 men. It is in determining the volume, not the direction, of actual employment that the existing system has broken down (Keynes, 1936, p.379)."

The problem is not the overthrow and replacement of that system, but rather its repair. However, the old Keynesian diagnosis of the problem is different from MIT economics' diagnosis.

The MIT School offers a Pigovian diagnosis based on market failures and frictions, which leads to new Keynesian economics. An old Keynesian critique derives from the economics of Keynes' *General Theory*. Real world monetary economies are marked by fundamental uncertainty regarding the future, and they are also peopled by emotional human beings who are motivated by the ebb and flow of animal spirits. In such economies, AD falls when people delay spending plans in response to uncertainty and depressed animal spirits and wait out their fears about an uncertain future by holding money. Furthermore, market economies can also produce income inequality, which can also undermine AD.

The market system may be unable to restore a level of AD sufficient to ensure full employment. That is because there is no coordinating mechanism for recycling delayed spending into current spending, and nor do lower prices solve the problem in a monetary economy in which debt is used extensively. A fall in the general price level increases the burden of debts, causing cutbacks in spending. It also causes defaults that can wreck the banking system and upend financial markets. Deflation and the prospect of lower future

prices may further encourage people to delay spending because buyers expect lower future prices (Palley, 2008).

Such arguments lead to a fundamentally different political economy. *Laissez-faire* economies do not automatically produce Pareto-optimal or near Pareto-optimal outcomes. They can also have serious negative consequences for freedom which undermines the claim that *laissez-faire* is the best way to promote freedom.

First, unfettered markets can produce high unemployment and great income inequality which results in economic deprivation that hollows and caricature freedom by removing the means to enjoy freedom. In the language of Amartya Sen (1999, p.xii), unemployment and economic deprivation are forms of "unfreedom".

Second, income and wealth inequality can have profound political consequences because they tilt political power in favor of the rich. Since part of democratic freedom is the enjoyment of political freedom through the democratic system, this shift in power to the rich implicitly reduces the freedom of the rest. To paraphrase George Orwell, it creates a world in which some are freer than others -- a form of political unfreedom.

Third, the proclivity of *laissez-faire* economies to generate high unemployment and income inequality also directly threatens political freedom and stability by producing alienation. This is the foundation of the critique of neoliberalism articulated by Karl Polyani (1944) in his analysis of the failings of 19th century capitalism that led to early-20th century fascism. A political economic system that does not value people may work in times of prosperity, but it risks breakdown in times of prolonged economic hardship and insecurity. Under such conditions, there can easily be a turn away from the democratic process and a turn to suppression of freedom in the form of politics of intolerance that

scapegoat particular ethnic and racial groups, or even a turn to authoritarian politics that attacks the freedom of all. By assuming away the economic problem, Friedman's political economy is blinded to the issues of unfreedom and the need for an economic system that generates politically sustainable outcomes.

A fourth critique (Palley, 2012, chapter 12) of Friedman's American neoliberalism derives from Adam Smith, the misappropriated patron economist of American neoliberalism. Smith believed markets require individuals that are socialized with a moral sensibility to function efficiently, an argument he developed in his *Theory of Moral Sentiments* (Smith, 1759) which was published almost twenty years before *The Wealth of Nations* (Smith, 1776). Those moral sentiments can be thought of as a form of social capital that is collectively reproduced, and they generate values such as trust and honesty that are essential for markets to function and not be overwhelmed with transaction and enforcement costs. Their creation requires public investment, such as education, that creates shared social identification and a sense of inclusion.

Once again, Friedman's American neoliberalism is blind to these needs, and its blindness means it misunderstands the foundation of an efficient market economy. That leads to an ironic situation whereby Friedman's neoliberal policies rundown and fail to replenish the social capital needed for efficient capitalism, thereby undermining capitalism. That is a plausible interpretation of the history of past thirty years when society has been living off the social capital created in the prior thirty period of social democratic old Keynesianism. The exhaustion of that social capital is evident in the financial crisis of 2008, a contributory cause of which was looting of the financial sector. That looting was accomplished by an incentive pay system that rewarded executives and

loan officers for deals done today without regard to consequences tomorrow. Lack of integrity among executives contributed to massive systemic failure, showing the powerful logic of Adam Smith's identification of the importance of moral sentiments.

An old Keynesian economic perspective rejects the inadequate social foundation of Friedman's neoliberal political economy and recognizes that a market economy needs old Keynesian economic and social policies to generate efficient sustainable shared prosperity. That need raises important issues regarding effectiveness of government, an issue that Friedman rightly raised. However, Friedman adopted a political economy that placed markets in opposition to an incompetent and self-interested government: hence, his call for policy rules and minimalist government. Along with MIT softcore neoliberals, old Keynesians believe better outcomes are possible once government is situated in a competitive democratic context with appropriate constitutional rules and reasonable income inequality to counter the political effects of money and wealth.

Lastly, there is one further deep socio-political difference from Friedman. Whereas Friedman represented the private sector economy as if it had a unified interest, left old Keynesians see the market as a place of conflict, particularly class conflict and worker-capital conflict. Rather than a single market interest, there are competing and conflicting interests. The challenge of politics is to manage those interests and prevent particular interests from gaining undue influence over government and policy. Political institutions and rules are needed to structure and negotiate those conflicts. That is a fundamentally different construction of political economy compared to Friedman's simplistic classless 'us' (the market) versus 'them' (government).

7. Conclusion: escaping Friedman's shadow

Milton Friedman's influence on the economics profession has been enormous. It is reflected in Lawrence Summers' (2006) statement that "we are now all Friedmanites". That Friedman had such an effect on the profession in part reflects the political and social forces that made neoliberalism the dominant global doctrine after 1980. It is also testament to Friedman's rhetorical powers. Powerful political forces created the neoliberal wave, but Friedman both rode that wave and contributed to it.

Friedman's professional triumph is also testament to the weak intellectual foundations and anti-intellectualism of the economics profession. As members of society, professional economists inevitably get caught up and participate in ideological waves that sweep society. However, they should also have trained capacity to stand aside, observe, and question those waves. With Milton Friedman, the profession failed. Close interrogation of his ideas reveal them to be substantially flawed, conceptually and empirically, and they are defended by an unsound methodology of economics.

Milton Friedman's vision and ideas are now deeply rooted in society and the economics profession, and his triumph has taken economic understanding back in a pre-Keynesian direction. That means the goal remains that identified by Keynes:

> "..not to dispose of the "Manchester System", but to indicate the nature of the environment which the free play of economic forces requires if it is to realize the full potentialities of production (Keynes, 1936, p.379)."

The immediate challenge is how to create space for a hearing for old Keynesian economics which has been squeezed out of the academy. With his doctrines of mark I monetarism and mark II monetarism (new classical macroeconomics), Milton Friedman led the charge against old Keynesianism from the right. However, the trap was closed by new Keynesian economics which has nothing to do with Keynesian economics, but fools

economists into believing it does. So-called new Keynesianism is simply mark II monetarism with the addition of imperfect competition and price and nominal wage rigidities. Yet, by enabling the claim that macroeconomics is fully characterized by a divide between new Keynesian and new classical macroeconomics, new Keynesianism creates a pincer that excludes old Keynesianism. As long as that pincer holds, economics will remain under the shadow of Milton Friedman.

Prying open the pincer requires surfacing the role of Friedman's thinking in new Keynesian economics and making clear the distinction between old Keynesian and new Keynesian economics. Words and ideas are the tools. The process should start by relabeling new Keynesian economics as new Pigovian economics, and thereafter it should expose the shared Friedmanite core of new classical and new Pigovian macroeconomics.

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